

### **REMARKS/ARGUMENTS**

Reexamination and reconsideration of this Application, withdrawal of the rejections, and formal notification of the allowability of all claims as now presented are earnestly solicited in light of the remarks that follow.

Independent claim 1 has been amended to recite "heated perforation means" and to clarify that the perforation means extending from the outer surface is located about the entire circumference of the first roller. Support for the amendment to claim 1 can be found at least in Figures 1-2 of the present application as originally filed. As such, no new matter has been entered.

#### **I. Currently Claimed Invention**

According to the present invention, as defined claim 1, a perforated nonwoven is produced by directing the nonwoven between a first roller and a second roller. The first roller has a perforation means, such as needles, extending outwardly from the outer surface of the first roller. The perforation means is provided about the entire outer circumference defined by the outer surface of the first roller. The second roller has an outer surface covered by a felt material. The perforation means engage through the nonwoven and into the felt material of the second roller. The perforation means cause displacing of the fibers of the nonwoven and also form contours in the felt material. Applicant has found that by using a felt covered roller in the perforation method, superior perforation results are achieved. Better perforation results means that the apertures of the perforations are more clearly defined. The superior perforation results are especially pronounced when the perforated means is heated. Beneficially, improved stabilization of the perforations and structures /geometries assumed is readily realized by the heating of the perforated means. See paragraph [0050] of the present publication (i.e., U.S. Publication No. 2006/0128245.

## II. Obviousness Rejections

To establish a *prima facie* case of obviousness, according to a test predominately used by the courts, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim elements. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

With regard to the Supreme Court's decision in *KSR Int'l. Co. v. Teleflex, Inc.*, 550 U.S. \_\_\_, 82 USPQ2d 1385 (2007), it is noted that the Court did not dismiss the usefulness the well-established "teaching, suggestion, or motivation" test set forth above, but merely cautioned against its rigid application. The Supreme Court in *KSR* commented that the Federal Circuit "no doubt has applied the test in accord with these principles [set forth in *KSR*] in many cases." *Id.* at \_\_\_, 82 USPQ2d at 1396. However, the Supreme Court also opined that "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results. . ." *Id.* at \_\_\_, 82 USPQ2d at 1395-96. Regardless of the precise test used, the Court, quoting *In re Kahn*, cautioned that " '[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.' " *Id.* at \_\_\_, 82 USPQ2d at 1396.

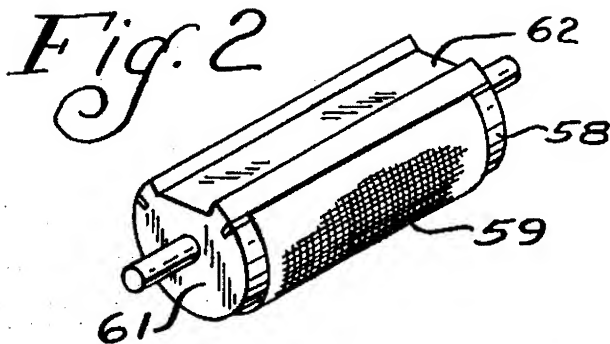
Applicants submit that the Office has not proven a *prima facie* case of obviousness because none of the cited references, whether considered alone or in any combination, teach, suggest, or otherwise render predictable a method for the manufacture of a perforated nonwoven by directing the nonwoven between two rollers in which one of the rollers includes heated perforating means provided about the entire outer circumference thereof and the second roller having an outer surface covered by a felt material. More particularly, Applicants submit that the purported combination of references is not predictable in the fashion put forth by the Office and

as required by KSR because the primary reference teaches away from the modification proposed by the Office. Additionally, such a modification would render the invention of the primary reference unsatisfactory for its intended purpose.

A.

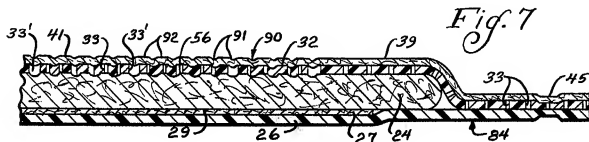
Claims 1, 3, 6, 8 and 30-33 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Karami et al., U.S. Patent No. 3,965,906 (hereinafter “Karami”) in view of Ciaccia et al., U.S. Patent No. 4,257,842 (hereinafter “Ciaccia”) as evidenced by Mish et al.; Merriam Webster’s Collegiate Dictionary, page 840 (hereinafter “Mish”). The Office cites Mish for support that paper-wool encompasses felt. Applicants respectfully traverse this rejection.

Karami is generally directed to an absorbent article having a front and back surface, a fluid impervious backing sheet covering the back surface of the pad, and a perforated thermoplastic film covering the front surface of the pad. A pattern is fused into the film to enlarge a plurality of perforations in the film and fuse the film to the pad in the locality of the pattern. See column 1, lines 55-61. The apparatus taught by Karami for producing such an article includes a perforator (42) having a plurality of needles (46) to impart perforations through webs (32) and (39). The apparatus includes a heating member (58) separate from the perforator (42). The heating of the web sections containing perforations enlarges the diameter of the perforations. See column 6, lines 2-5. However, Karami expressly teaches that the heating member (58) has a “cutout portion (62) to prevent contact of the heating member (58) against the webs (32) and (39) intermediate the pads (24) as they pass beneath the member (58).” See column 4, lines 22-25 (emphasis added). That is, Karami expressly teaches that the sections of the webs that will not be positioned over the pad should not be heated (to avoid enlarging the perforations at these locations). The heating member (58) of Karami is illustrated in Figure 2 (provided below for ease of reference).

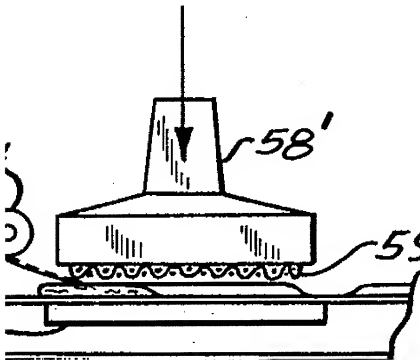


As can be seen from Figure 2, the heating member (58) does not have a perforating means provided about the entire outer circumference thereof. Accordingly, the heating member (58) of Karami's apparatus enables the enlargement of perforations located over the pad (24), while intentionally preventing the enlargement of any perforations located in the web sections located between the absorbent pads. For instance, Figure 7 of Karami illustrates the comparison of non-heated perforations (33) with the heated (and therefore enlarged) perforations (33'). As can be seen in Figure 7, the perforations (33) located in the web sections not positioned over the pad

(24) are not enlarged because they have not been heated. As such, the webs can be more easily and securely sealed around the pad. Figure 7 has been provided below for ease of reference.



As an alternative, Karami teaches that the apparatus can include a reciprocating heating element (58') for fusing a pattern in the web against the front surface of the pad. This heating element (58') is illustrated in Figures 3-4. As shown in Figure 3, the heating element (58') lowers to heat the web positioned over a pad and rises so that the web sections located between two pads is not heated. Figure 3 is provided below.



Similar to the heating member (58) illustrated in Figure 2 and discussed above, the heating member (58') illustrated in Figure 3 also does not include a perforating means extending about the entire circumference thereof. Thus, Karami again expressly teaches that only the web sections positioned over a pad should be heated to enlarge the size of the perforations. As such, Karami clearly teaches that the method/apparatus should only provide sectional heating of the web to ensure that only the web sections located over the pad are heated (and thus selectively enlarging the perforations at these web sections). As such, any proposed modification of heating the perforator in the apparatus of Karami would be in direct contravention to an objective of Karami to avoid the heating of all sections of the webs.

Contrary to the teachings of Karami, the currently claimed invention uses a roller having a heated perforation means extending outwardly from the outer surface about the entire outer circumference of the roller. Accordingly, the currently claimed invention does not provide the sectional heating taught as essential to the apparatus/method of Karami.

As acknowledged by the Office, Karami does not teach heating the perforator or a felt surface on the second roller. The Office, however, argues that Ciaccia cures these deficiencies.

Ciaccia is directed to embossed wallpapers and processes for the production of embossed wallpapers. Ciaccia teaches that the embossing operation can be carried out by passing the sheet between two cylinders (rollers) of which one is an embossing cylinder that in general is made of steel, while the other cylinder is a contrasting one and may be made of hard rubber, for instance of neoprene, or of paper-wool. The Office cites Mish for support that paper-wool encompasses felt. However, Ciaccia at least does not teach, suggest, or otherwise render predictable heating a perforator.

Applicants submit that Karami and Ciaccia, alone or in combination, do not teach suggest or otherwise render predictable a method for the manufacture of a perforated nonwoven by directing the nonwoven between two rollers in which one of the rollers includes heated perforating means provided about the entire outer circumference thereof and the second roller having an outer surface covered by a felt material. As such, Applicants submit that this rejection has been overcome and request withdrawal thereof.

**B.**

Claims 3 and 7 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Karami in view of Ciaccia (as evidenced by Mish), and further in view of Giacometti, EP 0598970 (hereinafter "Giacometti").

As discussed above, the combination of Karami and Ciaccia does not teach, suggest or otherwise render predictable a method for the manufacture of a perforated nonwoven by directing the nonwoven between two rollers in which one of the rollers includes heated perforating means provided about the entire outer circumference thereof and the second roller having an outer surface covered by a felt material. As acknowledged by the Office and discussed above, Karami teaches heating after perforations have been generated as opposed to while the perforations are being generated. The Office, however, argues that Giacometti cures this deficiency.

Giacometti is directed to a method for forming a web that is permeable to liquids. The method of Giacometti includes passing a film between two rotating cylinders, in which one of the cylinders includes a studded surface and the other cylinder has a smooth surface. The rotation speed of the smooth surfaced cylinder and the advancing speed of the film is less than that of the studded cylinder so that a slipping action is realized. This slipping action creates holes having strands of partially detached material. Giacometti teaches that one or both of the cylinders can be heated.

As referenced above, the purported combination of references is not predictable in the fashion put forth by the Office and as required by KSR because the primary reference (i.e., Karami) teaches away from modifying the perforator (42) to be heated. That is, Karami teaches that only web sections positioned over the pad should be heated, while perforated web portions located between pads on the driven belt should remain unheated. As such, the perforator of Karami could not be heated because all of the perforated sections of the web would be heated and all of the perforations would be enlarged. Such a modification, as discussed extensively above, would be in direct contrast to the express teachings of Karami. Furthermore, any such modification would require a substantial reconstruction of the Karami method/apparatus and render the Karami method/apparatus unsatisfactory for its intended purpose. In such scenarios, the combination of references fails to establish a *prima facie* case of obviousness. See MPEP

2143.

In this regard, it would not be predictable to modify the perforator of Karami with the heated cylinder of Giacometti since the apparatus/method of Karami requires sectional heating of the web to ensure that only the web sections located over the pad are heated (and thus selectively enlarging the perforations at these web sections). Any proposed modification of heating the perforator in the apparatus of Karami would be in direct contravention to an objective of Karami, namely to avoid the heating of all sections of the webs. Indeed, in KSR in the context of the importance of predictability with respect to propriety of a combination of references, the Supreme Court extensively discusses U.S. v. Adams, 383 U.S. 39 (1966). In U.S. v. Adams, the Supreme Court found the claims not to be obvious even though the claims were drawn to a structure already known in the art that was altered by the substitution of one known element with another with predictable results since the prior art taught away from combining certain ones of the known elements. *Id.* at 50-52. Moreover, as a matter of practice, MPEP § 2143 describes a number of different rationales for obviousness and requires an Examiner to articulate a number of findings to support an obviousness rejection including, in most instances, a finding that the proposed modification or combination would have been predictable to one of ordinary skill in the art. Consistent with the guidance provided by KSR, MPEP § 2143 also repeatedly notes that obviousness cannot be established under a respective rationale in instances in which an Examiner fails to properly establish any one of the requisite findings, such as in the present application in which the combination of Karami and Giacometti does not provide predictable results in light of Karami's express teaching away and the fact that such a modification would render the method/apparatus of Karami unfit for its intended purpose.

For at least these reasons, Applicants submit that the Office has not established a *prima facie* case of obviousness. As such, Applicants request withdrawal of this rejection.

C.

Claim 5 stands rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of Karami and Ciaccia and further in view of McGrew, U.S. Patent No. 5,521,030



(hereinafter "McGrew"). The Office cites McGrew for allegedly teaching a shrinkable hose. Applicants respectfully traverse this rejection.

McGrew is directed to a method for producing durable embossing tools, particularly a embossing roller having a single-piece holographic surface without seams or clamps.

In this regard, and as previously discussed, independent claim 1 now pending, from which claim 5 depends, is not obviated by Karami, Ciaccia and Giacometti, either separately or in combination, and McGrew does not remedy any of the noted deficiencies in this regard. Applicant thus submits that this rejection has been overcome and requests withdrawal thereof.

**D.**

Claim 34 stands rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of Karami and Ciaccia and further in view of Wagner, DE 19856223 (hereinafter "Wagner"). Applicants note that the Office refers to U.S. Patent No. 6,739,024 as an English translation. Applicants respectfully traverse this rejection.

Wagner is directed to a method for producing a structured, voluminous non-woven web or velourised film from a thermoplastic by producing an unstructured web and subsequently processing this web using a pair of rollers. The pair of rollers consists of a positive roller having numerous positive bodies distributed over the roll sleeve surface and a negative roller having equally as numerous cavities. During the rolling process, the positive bodies engage with the cavities and stretch the unstructured web in the area of the roller engagements in such a way that a deep-drawn web structure with numerous cavities is produced. After the web has passed through a roller gap, the deformed web, still bonded to the positive roller, is brought into contact with a perforating tool and perforated.

In this regard, and as previously discussed, independent claim 1 now pending, from which claim 34 depends, is not obviated by Karami, Ciaccia and Giacometti, either separately or in combination, and Wagner does not remedy any of the noted deficiencies in this regard. Applicant thus submits that this rejection has been overcome and requests withdrawal thereof.

**E.**

Claim 35 stands rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of Karami, Ciaccia, and McGrew, and further in view of the Wagner. Applicants respectfully traverse this rejection.

Each of these references have been discussed above. Independent claim 1 now pending, from which claim 35 depends, is not obviated by Karami, Ciaccia, McGrew, and Giacometti, either separately or in combination, and Wagner does not remedy any of the noted deficiencies in this regard. Applicant thus submits that this rejection has been overcome and requests withdrawal thereof.

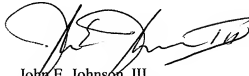
**III. Conclusion**

In view of at least the amendments and remarks made above, Applicants submit that the pending claim is in condition for allowance. Applicants respectfully request that the claim be allowed to issue. If the Examiner wishes to discuss the application or the comments herein, the Examiner is urged to contact the undersigned.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefor (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Appl. No.: 10/521,532  
Amdt. dated: February 17, 2010  
Reply to Office Action of October 28, 2009

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'John E. Johnson, III', with a stylized flourish at the end.

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